



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,288	06/20/2003	Alan K. Schaer	09610.1271	1511
90044	7590	08/24/2010		
Edward J. Lynch Four Embarcadero Center Suite 1700 San Francisco, CA 94111			EXAMINER COHEN, LEE S	
			ART UNIT 3739	PAPER NUMBER
			MAIL DATE 08/24/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/601,288		SCHAER, ALAN K.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Lee S. Cohen		3739	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 and 54-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-52, 54-60 and 64-67 is/are allowed.
- 6) ☒ Claim(s) 61-63 and 68-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 68, 69, 71, 72, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panescu et al (5,769,847) in view of Nashef et al (5,682,899). Applicant's attention is directed to columns 5-8 in Panescu et al and, in particular, the figure 9 embodiment. Panescu et al also disclose at column 6, lines 28-32, that the electrodes can be as small as 4 French (1.35 mm) in diameter and have lengths varying from about 2 mm to about 10 mm. Adjacent electrodes are spaced no farther apart than about 2.5 times an electrode diameter. Accordingly, the electrode spacing can be within the claimed range. The reference further discloses a core member 28 that extends into a jacket (see Figure 8).

Nashef et al disclose the use of a metal band about a temperature sensor to improve its performance. Applicant's attention is directed to Figure 1, elements 19 and 20. Given this teaching, it would have been obvious to the skilled artisan to incorporate a metal band in Panescu et al to effect superior temperature sensing. Further, the process by which the band is attached to the temperature sensor is within the level of skill for the artisan to select to optimize performance.

With respect to claims 68 and 69, the recited methods are deemed to be obvious over the Panescu et al reference. Detecting electrical activity with the electrodes after delivering ablation

Art Unit: 3739

energy is conventional in the art and would have been an obvious step. Further, the Panescu et al method encompasses delivering of energy to the electrodes in various patterns (i.e., sequential) to achieve optimum lesion formation.

Claims 61-63, 70, and 73-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panescu et al (5,769,847) in view of Nashef et al (5,682,899) as detailed supra, and further in view of Littman et al (5,509,411). Littman et al disclose the use of braided helical conductors in a shaft that partially covers the electrodes as well as the particular core structure to have been well known in the art. The reference also discloses the use of a distal tip coil member. Given these teachings, it would have been obvious to the skilled artisan to incorporate these features in the Panescu et al device to render it more flexible and maneuverable.

#### *Response to Arguments*

Applicant's arguments filed have been fully considered but they are not persuasive.

Nashef et al clearly teaches the metal band feature of the temperature sensor. The fact that it dissipates heat generated by the sensor does not detract from the fact that it would inherently facilitate detecting the temperature adjacent the band which the temperature sensor is designed to detect. Therefore, the use of such a structure in Panescu et al would engage tissue and facilitate detection of temperature. The temperature of the adjacent electrode is effectively the temperature of the adjacent tissue which is being ablated by the electrode and detected by the temperature sensor. Further, the sensor 20 in Nashef et al does not contact fluid through an opening (see column 6, lines 14-19). Figure 1 is merely a cross-sectional view. Similar temperature sensor 22, similarly shown in Figure 1, is clearly shown in later Figures not to be exposed through an opening. Accordingly, the rejections are still deemed to be proper.

***Allowable Subject Matter***

Claims 1-52, 54-60, and 64-67 are allowed.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee S. Cohen whose telephone number is 571-272-4763. The examiner can normally be reached on Monday-Friday, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lee S. Cohen  
Primary Examiner  
Art Unit 3739

/Lee S. Cohen/  
Primary Examiner, Art Unit 3739  
December 21, 2009